



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BETHESDA 14, MD.

NATIONAL INSTITUTES OF HEALTH
O Liver 6-4000

November 22, 1961

Dr. G. Schramm
Max-Planck - Institut fur Virusforschung
Tubingen, Germany

Dear Dr. Schramm:

I read your synthetic procedure for obtaining deoxypolynucleotides with great interest. I very much would like to get or make 2 to 5 mg of deoxypoly A, deoxypoly T, deoxypoly C, deoxypoly G, and also mixed polymers. I am interested primarily in cell-free protein synthesis from an enzymatic point of view. Recently we found that polyribo U served as a synthetic messenger RNA which directed the synthesis of polyphenylalanine in a cell-free system. I am enclosing reprints of this work which describe these experiments in detail. I would like to use the deoxypolynucleotides in this work for I feel certain that some will work in our enzymatic system. I would be glad to collaborate with you, if you would like to, on aspects of our work dealing with these polymers. Certainly they would have a great deal of potential in our cell-free system. Such a collaborative effort could yield important results in a short time.

I would be glad to either synthesize the polymers if you would send me the detailed protocol, or to receive the polymers from you.

Looking forward to hearing from you, I remain,

Sincerely yours,

Marshall W. Nirenberg
Marshall W. Nirenberg

Enclosures